

Division of Waste Management Solid Waste Section

UNIT	UNIT TYPE:												
Lined MSWLF		LCID		YW		Transfer		Compost	X	SLAS		COUNTY: Durham	
Closed MSWLF		HHW		White goods		Incin		T&P		FIRM		PERMIT NO.: 32-04	
CDLF		Tire T&P / Collection		Tire Monofill		Industrial Landfill		DEMO		SDTF		FILE TYPE: COMPLIANCE	

Date of Site Inspection: February 17, 2012 Date of Last Inspection: January 14, 2011

FACILITY NAME AND ADDRESS:

City of Durham Large, Type 1 Solid Waste Compost Facility 2115 East Club Boulevard Durham, NC 27704

GPS COORDINATES: N: <u>36.03767</u> E: <u>-78.85255</u>

FACILITY CONTACT NAME AND PHONE NUMBER:

Chris Marriott, City of Durham - Waste Disposal Manager

w. 919-560-4186 x32253 f. 919-560-1197 c. 919-452-2804 chris.marriott@durhamnc.gov

FACILITY CONTACT ADDRESS:

Chris Marriott, Waste Disposal Manager City of Durham Solid Waste Management Department 1833 Camden Avenue Durham, NC 27704

PARTICIPANTS

John Patrone, NCDENR – Solid Waste Section (SWS) Chris Marriott, City of Durham – Waste Disposal Manager Bruce Woody, City of Durham – Assistant Disposal Manager

STATUS OF PERMIT:

Permit To Operate (PTO) issued June 9, 2010 PTO expiration date June 9, 2015

PURPOSE OF SITE VISIT:

Comprehensive Audit

STATUS OF PAST NOTED VIOLATIONS:

None

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OBSERVED VIOLATIONS

None

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

ADDITIONAL COMMENTS

On February 17, 2012, John Patrone met with Chris Marriott and Bruce Woody to conduct a comprehensive audit of the City of Durham Large, Type 1 Solid Waste Compost Facility located on East Club Boulevard in Durham, Durham County.

- 1. The facility is a Large, Type 1 Solid Waste Compost (SWC) Facility. It produces mulch from yard waste, untreated and unpainted wood, and wooden pallets.
- 2. The facility is located adjacent to the City of Durham Closed Municipal Solid Waste (MSW, 32-01) Landfill, access via gravel service road.
- 3. Material is received from Durham County.
- 4. City of Durham vehicles deposit material on site. Residents off-load material at a designated area adjacent to the City of Durham Transfer Facility/transfer station building (32-12). City of Durham personnel place the material into open top containers and routinely haul it to the facility.
- 5. All material brought to the facility is weighed on the vehicle scale at the City of Durham Transfer Facility.
- 6. The facility permit, operations plan, and site plan were discussed.
- 7. The facility is composed of five functional areas: receiving, grinding, windrow, curing/storage (not used), and stormwater retention (pond).
- 8. The area allotted for facility operation is 11.02 acres.
- 9. The facility is in operation Monday through Friday 7:30 am to 4:30 pm and on Saturday 7:30 am to noon.
- 10. The facility does not compost material. The mulch produced from yard waste is hauled to Novozymes North America, Inc. Large, Type 3 SWC Facility (35-04) to complete the compost process. And the mulch produced from untreated and unpainted wood and wooden pallets is hauled to PalletOne of North Carolina, Inc.
- 11. When the permit is updated/modified ensure that the facility operational process is incorporated into the operations plan. If the facility begins to compost material ensure the permit and operations plan are adhered to.
- 12. The facility's contractor maintains a wood grinder on site.
- 13. Yard waste is typically ground on Monday and Tuesday and hauled-off site weekly, on Friday.
- 14. Untreated and unpainted wood and wooden pallets are ground ~ twice a month or as needed and hauled-off site weekly or monthly, depending on the volume of mulch produced.
- 15. The facility conducts moisture and temperature readings once or twice a week on ground yard waste windrow(s) to ensure that the temperature is maintained below 160° F prior to it being hauled-off site. Records of windrow moisture and temperature readings were reviewed for January 2012. The facility had one windrow, maximum temperature recorded 132° F, and moisture level recorded < 5 (scale: 0 10). Windrows are not turned prior to being hauled-off site unless required to reduce temperature.
- 16. The facility has one temperature probe and moisture meter. The temperature probe was calibrated on February 7, 2012 and is calibrated twice a year. Ensure that temperature probe calibration records are maintained. It is suggested that the moisture meter is calibrated and records maintained.
- 17. The facility operational capacity is limited to 14,000 tons of feedstocks per year received for composting.
- 18. The facility maintains records of the amount and type of material received. The amount of material received from July 2011 through January 2012 is 8,279.59 tons (8,184.72 tons yard waste and 94.87 tons untreated and unpainted wood and wooden pallets).

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- 19. The facility annual report received by the SWS is dated July 26, 2011. Facility throughput for July 2010 through June 2011 is 13,153.45 tons. And the amount of compost (mulch) produced is 10,895 tons.
- 20. The facility has a stormwater retention pond designed to capture runoff from the site.
- 21. The facility is required to remove accumulated sediment in the stormwater retention pond to maintain designed storage volume.
- 22. The level of the stormwater retention pond is required to be maintained \leq 302.28 on the monitoring gauge. During the inspection, the stormwater retention pond was at 301.5 on the monitoring gauge.
- 23. The stormwater retention pond is piped (siphon controlled) to the North Durham Water Reclamation Facility (City of Durham letter, 03/16/11).
- 24. The stormwater retention pond is required to be repaired. The liner has been punctured in numerous spots (presumably by deer) above the maximum stormwater retention level.
- 25. It is suggested that the stormwater retention pond liner sidewall have its cover material replaced.
- 26. Until the stormwater retention pond liner is repaired, the facility shall inspect the pond twice daily, three times a week, maintain the water level accordingly, and install a deer/litter fence around the pond (City of Durham letter, 04/25/11). Records were reviewed for pond inspections and water level conducted 12/30/11 through 01/30/12. A deer/litter fence has been installed.
- 27. After the stormwater retention pond liner is repaired, provide the SWS a summary report with pictures (SWS email, 09/28/11).
- 28. Mr. Marriott stated that the material for the stormwater retention pond liner repair has been ordered.
- 29. The City of Durham Fire Department will respond to an emergency at the facility.
- 30. The facility shall maintain 25' fire lanes.
- 31. There was no indication of erosion or runoff.
- 32. Facility personnel are required to conduct daily inspection of the site. Eroded and rutted areas shall be repaired.

Phone: 336-771-5095 Fax: 336-771-4631

- 33. The facility is secured by a locked gate.
- 34. Access roads are of all-weather construction.
- 35. The facility has proper signage.
- 36. The permit expiration date is June 9, 2015.
- 37. Permit renewal application should be submitted to the SWS prior to February 9, 2015.

Please contact me if you have any questions or concerns regarding this inspection report.

John Patrone

Environmental Senior Specialist

Regional Representative

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Sent on: February 28, 2012	X	Email	Hand delivery	US Mail	Certified No. [_]

Copies: Dennis Shackelford, Eastern District Supervisor

Shawn McKee, Environmental Senior Specialist

Tony Gallagher, Environmental Supervisor

Donna Wilson, Environmental Engineer

Donald Long, City of Durham - Solid Waste Director (donald.long@durhamnc.gov)

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Digital pictures taken February 17, 2012 by John Patrone, DWM-SWS

Facility contract grinder unit, stored on site



Mulch (yard waste) on site



Mulch (untreated and unprocessed) wood and wooden pallets



Deer/litter fence installed around stormwater retention pond



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Stormwater retention pond (representative view), limited sidewall cover material



Stormwater retention pond liner puncture – painted white (representative view), numerous around pond



Stormwater retention pond level monitor gauge



City of Durham resident SWC material drop-off (adjacent to transfer station 32-12)

